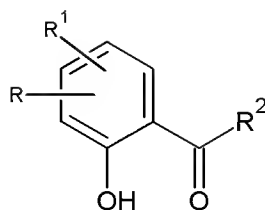


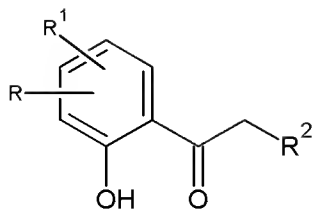
DRAWINGS

REPLACEMENT SHEET



R , R ¹	R ²
H	CH ₃
CH ₃	-CH ₂ CH ₃
Alkyl	CH ₂ R
Cycloalkyl	CH ₂ Aryl
Aryl	
Cl	
Br	
NH ₂	
-NHAlkyl	
-N(Alkyl) ₂	
-OH	
-SH	

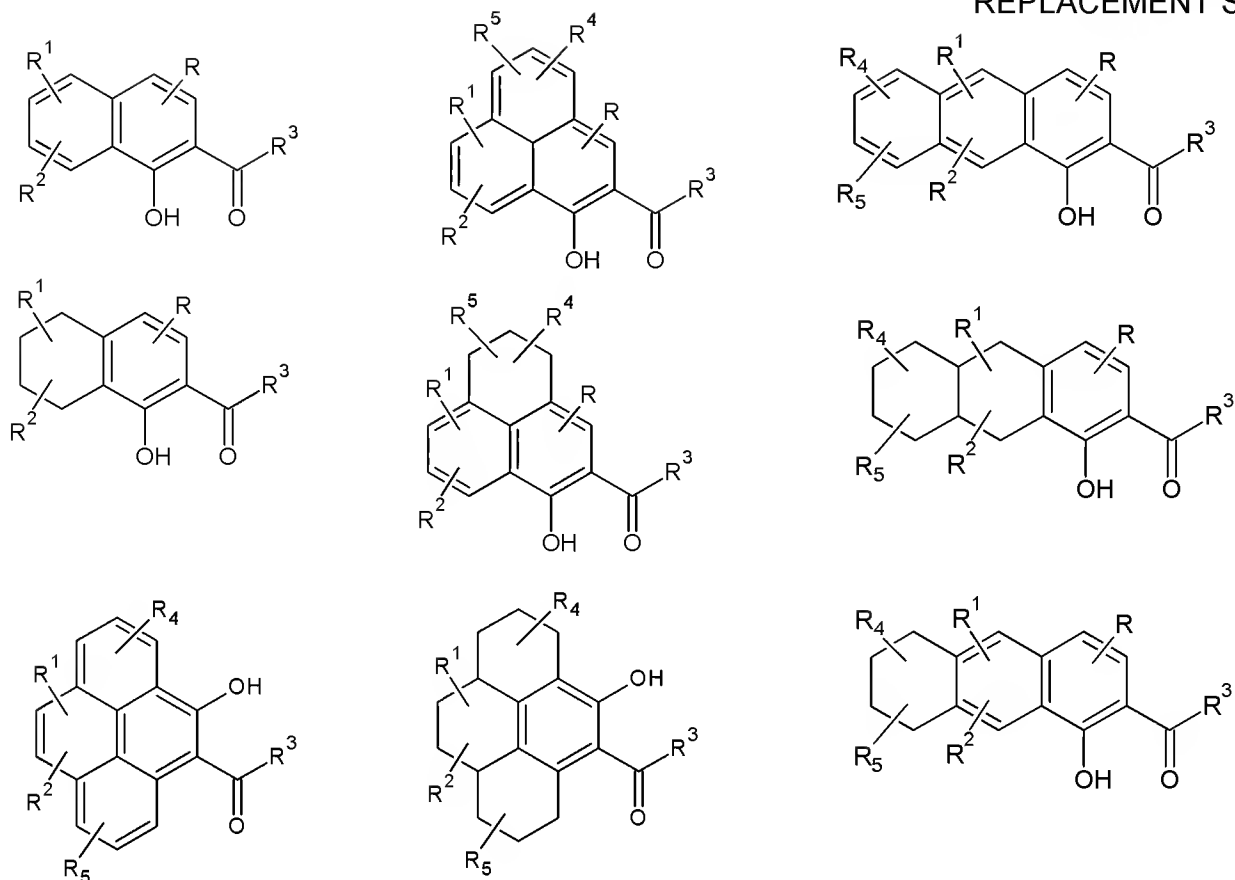
Figure 1. Hydroxyaryl Alkyl Ketone MMP Inhibitors



R , R ¹	R ²
H	H
CH ₃	CH ₃
Alkyl	CH ₂ R
Cyclo Alkyl	
Aryl	
Cl	
Br	
NH ₂	
-NH Alkyl	
-N(Alkyl) ₂	
-OH	
-SH	

Figure 2. Hydroxy Acetophenone and Hydroxy Propiophenone MMP Inhibitors

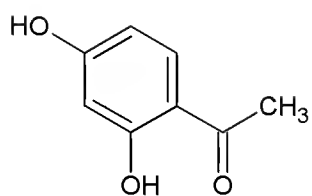
REPLACEMENT SHEET



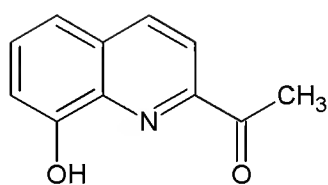
R, R ¹ , R ² , R ⁴ , R ⁵	R ³
H	CH ₃
CH ₃	-CH ₂ CH ₃
Alkyl	CH ₂ R
Cycloalkyl	CH ₂ Aryl
Aryl	
Cl	
Br	
NH ₂	
-NHAkyl	
-N(Akyl) ₂	
-OH	
-SH	

Figure 3. Hydroxyaryl Alkyl Ketone MMP Inhibitors with Additional Cyclic Rings

REPLACEMENT SHEET



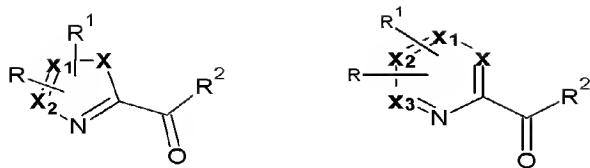
2,4 - Dihydroxy Acetophenone



2 - Acetyl - 8 - Hydroxyquinoline

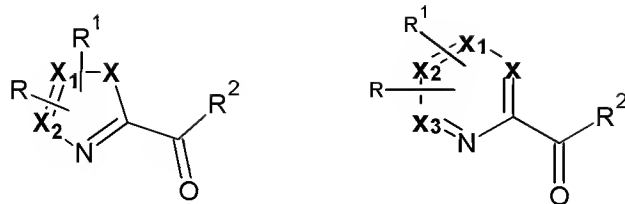
**Figure 4. 2,4- Dihydrox Acetophenone
and 2-Acetyl-8-Hydroxyquinoline MMP Inhibitors**

REPLACEMENT SHEET



R, R ¹	R ²	X, X ₁ , X ₂ , X ₃
H	CH ₃	CH ₂
CH ₃	-CH ₂ CH ₃	CH
Alkyl	Alkyl	O
Cycloalkyl	Aryl	S
Aryl	Cycloalkyl	N
Cl		
Br		
NH ₂		
-NH ⁺ Alkyl		
-N(Alkyl) ₂		
-OH		
-SH		

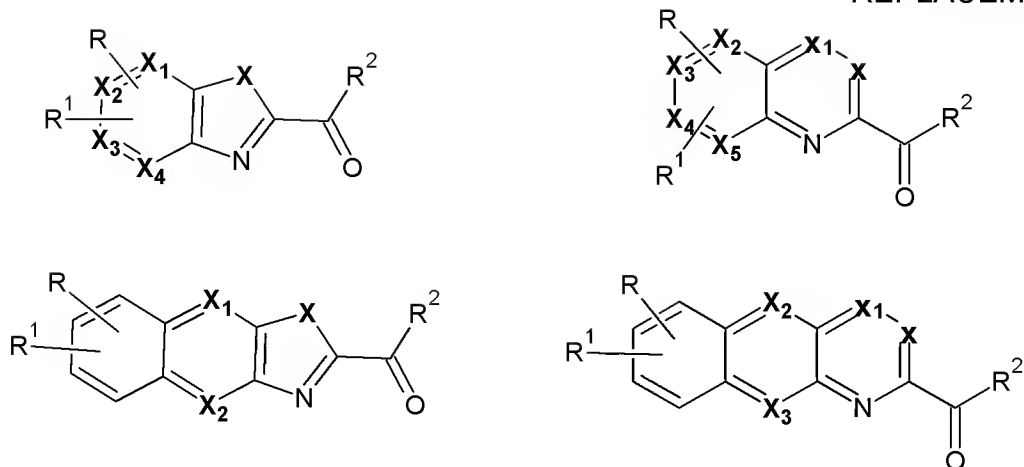
Figure 5. Five & Six Membered N-Heterocyclic Alkyl Ketone MMP Inhibitors



R, R ¹	R ²	X, X ₁ , X ₂ , X ₃
H	CH ₃	CH ₂
CH ₃		CH
Alkyl		O
Cycloalkyl		S
Aryl		N
Cl		
Br		
NH ₂		
-NH ⁺ Alkyl		
-N(Alkyl) ₂		
-OH		
-SH		

Figure 6. 2-Acetyl Substituted N-Heterocyclic MMP Inhibitors

REPLACEMENT SHEET



R, R ¹	R ²	X, X ₁ , X ₂ , X ₃ , X ₄ , X ₅
H	CH ₃	CH ₂
CH ₃	-CH ₂ CH ₃	CH
Alkyl	Alkyl	O
Cycloalkyl	Aryl	S
Aryl	Cycloalkyl	NH
Cl		
Br		
NH ₂		
-NH ⁺ Alkyl		
-N(Alkyl) ₂		
-OH		
-SH		

Figure 7. N-Heterocyclic Alkyl Ketone MMP Inhibitors with Additional Cyclic Rings

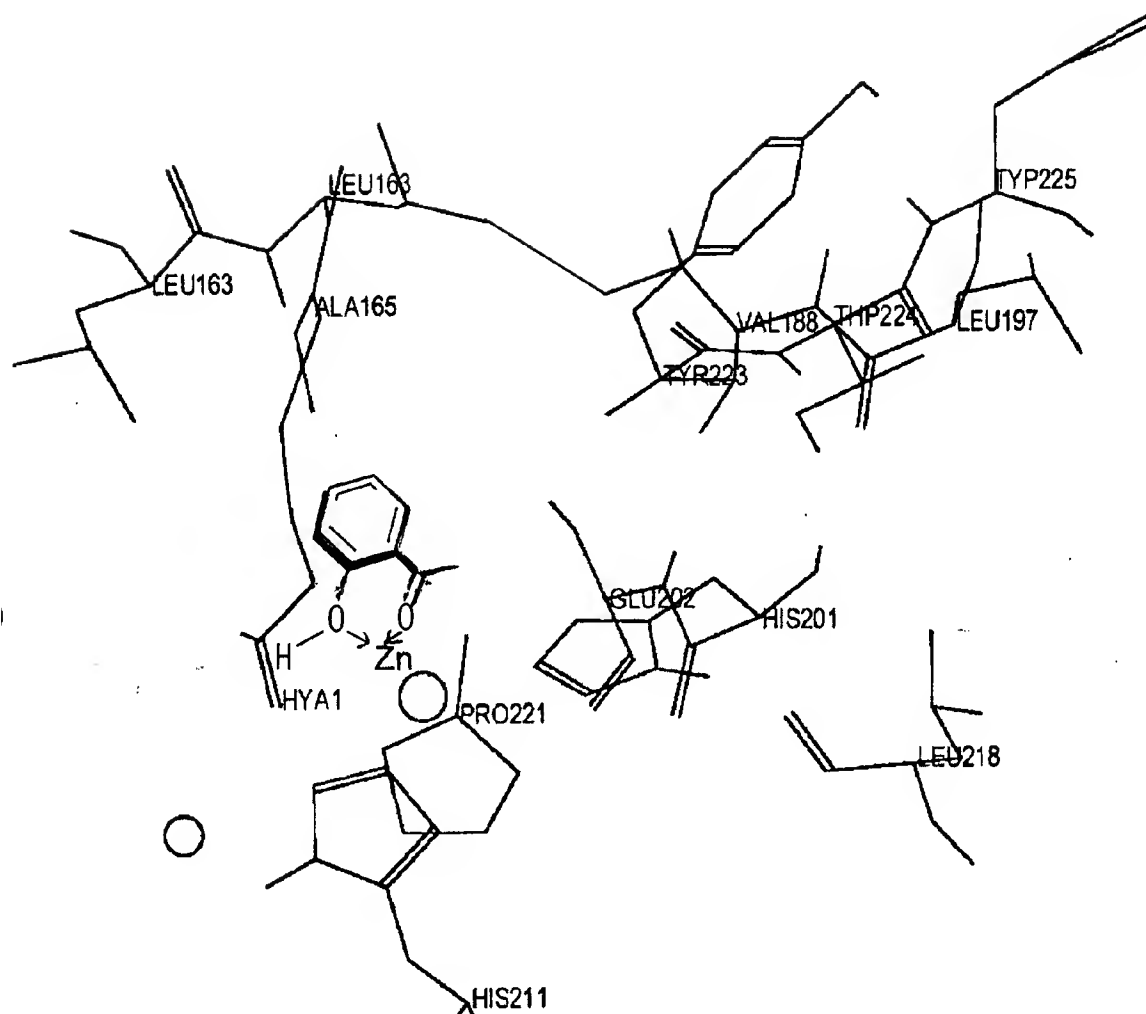


Figure 8. Proposed Inhibition of the Active-Site of MMP by Hydroxyaryl Alkyl Ketones